

Remarks/Arguments

The application has been amended and presently claims patentable subject matter. Independent claims 1, 37, 59, and 72 have been amended to more clearly define the inventive subject matter. Dependent claims 8, 9, 25, and 80 have been amended. Dependent claims 7, 65, 66, and 70 have been canceled.

The Examiner has rejected claims 1-82 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,717,168 to DeBuisser et al. ("DeBuisser"). Based on the amendment and remarks below, withdrawal and reconsideration of the rejections are respectfully requested.

Applicants' Invention

Applicants' invention is directed to a system and method of recording a writing performed on a surface. The system includes a stylus with signal transmitters and a detector assembly for receiving the signals. The stylus has one ultrasound signal transmitter devoted to providing position signals. Additional signal transmitters known as timing signals may also be used in conjunction with the position signals in order to record writing. The timing signals may be infrared signals. The detector assembly includes two receivers which receive signals from the transmitters and use logic to convert the signals to data corresponding to position and timing corresponding to writing.

The invention provides a compact, low profile, portable transcription system, which can operate attached to a processing unit such as a computer, or attached to a processing unit through a personality module. The system may alternatively operate detached from the processing unit or the personality module. As such, both the detector assembly of the system and the processing unit contain logic for converting data into positional coordinates. Such a system provides a portable unit that can operate with or without a processing unit or personality module.

The Cited Prior Art

U.S Patent No. 5,717,168 (DeBuisser et al.)

The DeBuisser patent is directed to a method and device for capturing and processing graphical information. More particularly, it is directed to capturing graphic information or writing including stroke width variables which occur with certain designated styluses depending on how it is held or applied to a support.

In order to accomplish this task, DeBuisser employs a comprehensive system including an instrument used to make a trace, the instrument having at least two ultrasound wave emitters carried by the instrument and spaced apart on the instrument in a longitudinal direction of the instrument. The emitters emit a plurality of ultrasound pulses which are received by several ultrasound wave receivers. The propagation times of the pulses are in turn measured and evaluated to define coordinates of a vector defined by the positions of the two emitters carried by the instrument.

The system of the DeBuisser patent also requires a processing circuit comprising measurement and calculation means for compiling information representative of the graphical information transmitted by the stylus.

Rejections Under 35 U.S.C. 102

Anticipation under 35 U.S.C. 102 requires each and every limitation of the claim to be disclosed in a single prior art reference, either expressly or inherently. The anticipating reference must disclose the elements in the arrangement called for by the claim. If any limitation of the claim is missing, the reference does not anticipate.

Reconsideration is requested of the rejection of claims 1-82 as anticipated by DeBuisser. DeBuisser does not disclose a system for recording a writing performed on a surface, wherein the system operates in conjunction with a processing unit, and also has an ability to track and record writing while not connected to the processing unit (independent claims 1 and 37). The processing unit may be a desktop computer, a laptop computer, a wireless device, a hand-held device, a printer, or any combination thereof. The ability to operate with or without the processing unit provides a portable

system which may be used independently of the processing unit. Such a feature is neither disclosed nor suggested by DeBuisser.

DeBuisser also does not disclose a personality module as presently claimed, and does not disclose a personality module removably attachable to a base appliance for providing a user interface for the detector (claims 40 and 57). DeBuisser further does not disclose a method for recording a writing performed on a surface wherein positional data is downloaded from a detector to a detachable processing unit (claims 59 and 72).

The detachability of the processing unit or personality module in each of the above-referenced independent claim is the feature which DeBuisser is lacking, and will be addressed in this response. DeBuisser does not possess either a detachable processing unit or a detachable personality module.

The system of the present invention includes a detector assembly which includes logic and processing capabilities for performing the various calibration and calculation functions necessary for using the time of flight data to determine the position of the stylus relative to the detector assembly (see page 10, paragraph [0039] of application). The system of the present invention also includes a detachable processing unit or a detachable personality module. The processing unit includes logic to transform signals into positional data. The detachable personality module is multi-functional, providing user interface to access software and hardware functionality, allowing attachment to additional processing modules, and allowing for easier integration of future devices with the base appliance (see pages 21-22, paragraphs [0062-0063] of the application).

Because of the detector's logic capabilities, the transcription system of the present invention has the ability to track and record writing while not connected to a processing unit or a personality module. When used in conjunction with a removably attachable processing unit or personality module, the detector utilizes its internal local storage medium to record data, and displays the information at a later time using the processing unit (see page 12, paragraph [0043] of application).

The system, therefore, has several optional modes in which it may operate, depending on whether it is attached to or detached from the processing unit or personality module. The first mode allows the detector assembly to record writing using

the internal local storage medium, referred to as "auto ink capture." This allows the base appliance to record data whenever power is provided to the detector assembly, and permits a user to record writing when the detector assembly is not attached to a processing unit. A second mode allows the detector assembly to send data to a processing unit directly without storing the data locally. The processing unit processes the positional data in this mode. A third mode is a combination of the first and second modes and allows the detector assembly to record writing when the detector assembly does not detect the presence of processing unit, and then subsequently attach the processing unit, optionally downloading the stored writing, and then continue to send data directly from the detector assembly to the processing unit without storing the data locally (see pages 15-17, paragraphs, [0051 – 0052] of the application).

The operability of the system of the present invention with or without the processing unit or personality module is not disclosed in DeBuisser.

DeBuisser provides a device and method for capturing graphical data; the device requiring a processing circuit (60 of Figure 1) connected to the ultrasound wave receivers and comprising measurement and calculation means for compiling information representative of the graphical information transmitted from the stylus to the receivers (see column 6, line 62 – column 7, line 13 of DeBuisser). Processing circuit 60 of DeBuisser is not detachable from the receivers, nor is there an alternate processing unit attachable to processing circuit 60 of DeBuisser. Because DeBuisser does not disclose a detachable processing unit or a detachable personality module, it does not contain each and every element of the claimed invention.

The application is therefore considered to be in condition for allowance, and such action is solicited.

Respectfully submitted,



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